



Figure 8. A tidal pool formed as a result of high tide behind the beach armament.
Public pier is in the background.



Figure 7. Looking south from the public pier. Notice the extent of beach armoring.



Figure 6. The public pier. Picture taken during falling tide. There is no beach at high tide and as a result of severe beach erosion; beach armoring was necessary.

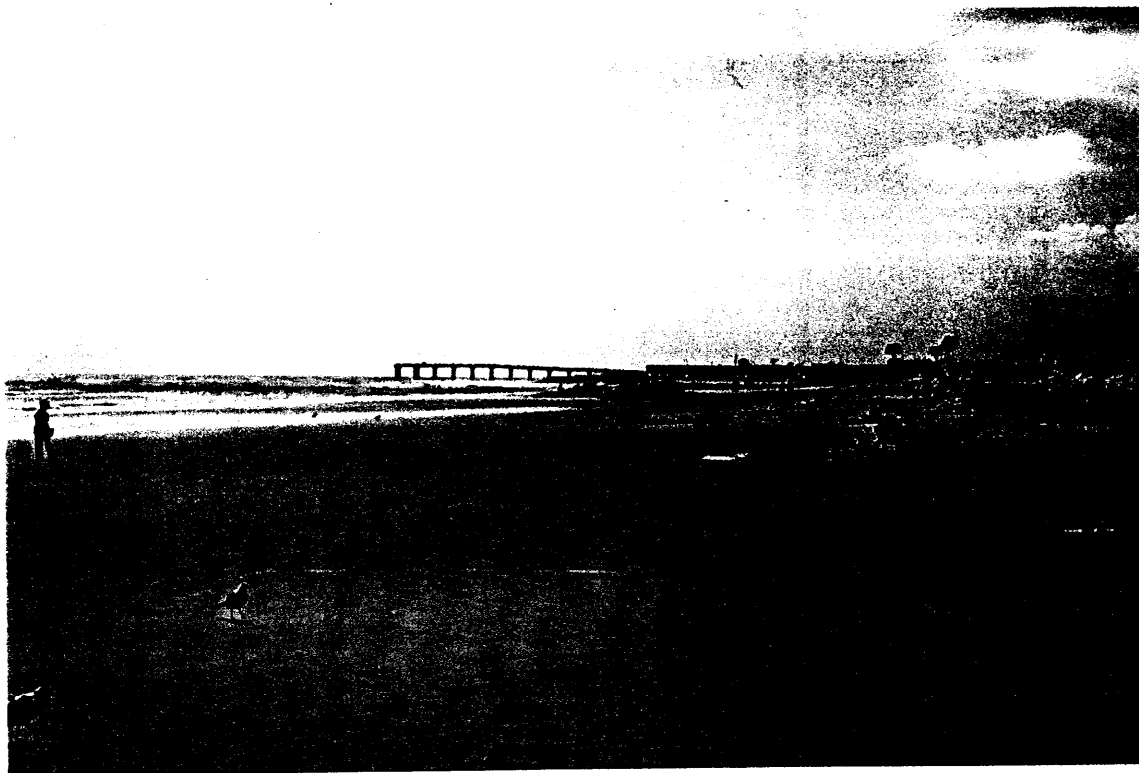


Figure 5. Looking South from the Anastasia State Recreational Area towards the public pier.



Figure 4. Looking North into the Anastasia State Recreational Area.



Figure 3. Anastasia State Recreational Area. There is no evidence of beach erosion landward of the supralittoral zone.

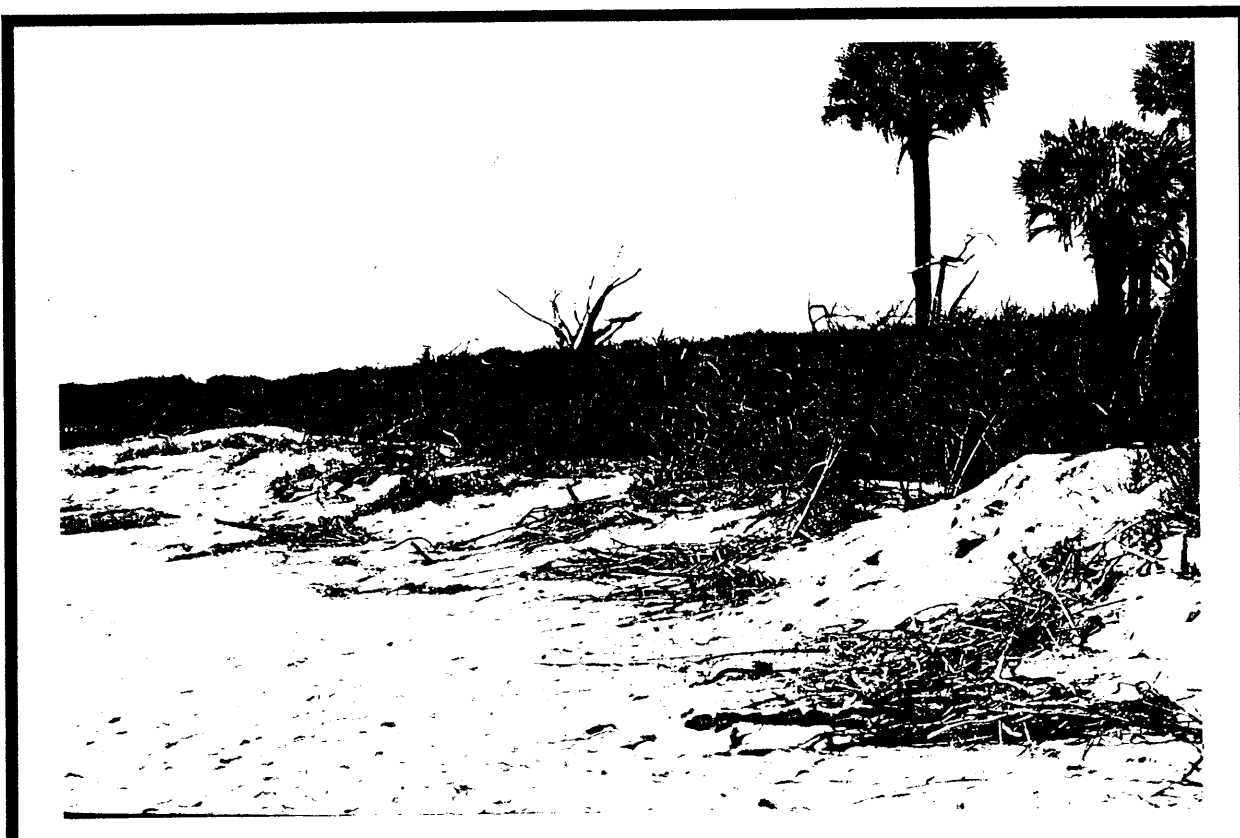


Figure 2. Anastasia State Recreational Area. This is suitable Anastasia Island beach mouse habitat. View is landward of the disposal site.

STANDARD MANATEE PROTECTION CONDITIONS

9.4.1 Manatee Protection.

9.4.1.1 The Contractor shall instruct all personnel associated with the project of the potential presence of manatees and right whales and the need to avoid collisions with these animals.

9.4.1.2 All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees and right whales which are protected under the Marine Mammal Protection Act of 1972, the Endangered Species Act of 1973, and the Florida Manatee Sanctuary Act. The Contractor shall be held responsible for any manatee or right whale harmed, harassed, or killed as a result of construction activities.

9.4.1.3 If siltation barriers are used, they shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.

9.4.1.4 All vessels associated with the project shall operate at "no wake/idle" speeds at all times while in waters where the draft of the vessel provides less than a four foot clearance from the bottom and vessels shall follow routes of deep water whenever possible. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category where navigational safety permits.

9.4.1.5 If a manatee(s) is sighted within 100 yards of the project area, all appropriate precautions shall be implemented by the Contractor to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease to ensure protection of the manatee. Construction activities shall not resume until the manatee has departed the project area.

9.4.1.6 Prior to commencement of construction, each vessel involved in construction activities shall display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8 1/2" x 11" reading, "Caution: Manatee Habitat/Idle Speed is Required in Construction Area." In the absence of a vessel, a temporary 3' x 4' sign reading "Caution: Manatee Area" will be posted adjacent to the issued construction permit. A second temporary sign measuring 8 1/2" X 11" reading "Caution: Manatee Habitat. Equipment Must Be Shutdown Immediately If A Manatee Comes Within 50 Feet Of Operation" will be posted at the dredge operator control station and at a location prominently adjacent to the displayed issued construction permit. The Contractor shall remove the placards upon completion of construction.

9.4.1.7 Any collisions with a manatee or sighting of any injured or incapacitated manatee shall be reported immediately to the Corps of Engineers. The order of contact within the Corps of Engineers shall be as follows:

Order of Contact of Corps Personnel
for Dredging Contractor to Report
Manatee Death or Injury

<u>Title</u>	<u>Telephone Number</u>	
	<u>Work Hours</u>	<u>After Hours</u>
Corps, Inspector	On site	Lodging Location
Mr. _____, Area Engineer, _____ (CESAJ-__ - __)	_____	_____
Dr. Hanley K. Smith, Chief Environmental Resources Branch, Planning Division (CESAJ-PD-E)	904/232-2202	904/745-0632
Mr. C. Alex Morrison, Acting Chief, Construction Branch, Construction- Operations Division (CESAJ-CO-C)	904/232-1120	904/367-0758
Mr. Giralmo DiChiara, Chief Construction-Operations Division (CESAJ-CO)	904/232-1122	904/737-1909

The Contractor shall also immediately report any collision with a manatee to the Florida Marine Patrol "Manatee Hotline" (800) 342-5367 as well as the U.S. Fish and Wildlife Service, Jacksonville Endangered Species Field Station (904) 232-2580.

9.4.1.8 The Contractor shall maintain a daily log detailing sightings, collisions, or injuries to manatees occurring during the contract period. The data shall be recorded on forms provided by the Contracting Officer (sample form is appended to the end of this section). All data in original form shall be forwarded directly to Dr. Hanley K. Smith, Chief Environmental Resources Branch, P. O. Box 4970, Jacksonville, Florida, 32232-0019, within 10 days of collection and copies of the data will be supplied to the Contracting Officer. Within 15 days, following project completion, a report summarizing the above incidents and sightings, including a list and addresses of all observers utilized during the construction will be submitted to the following:

Florida Department of Natural Resources
Marine Research Institute
Office of Protected Species Research
3900 Commonwealth Blvd. Mail Station 245
Tallahassee, Florida 32399

U.S. Fish and Wildlife Service
3100 University Blvd. S. (Suite 120)
Jacksonville, Florida 32216

Chief, Environmental Resources Branch
U.S. Army Corps of Engineers (CESAJ-PD-E)
P.O. Box 4970
Jacksonville, Florida 32232-0019

Florida Marine Patrol's District 8 Office
2510 2nd Avenue North
Jacksonville Beach, Florida 32250

Area Engineer, _____

APPENDIX III

COORDINATION



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

MAY 4 1995

Construction-Operations Division
Public Notice Number PN-SAH-199

PUBLIC NOTICE

TO WHOM IT MAY CONCERN: The District Engineer, Jacksonville District, U.S. Army Corps of Engineers, has forwarded a request to the State of Florida Department of Environmental Protection pursuant to Section 401 of the Clean Water Act of 1977. This Federal project is being evaluated and coordinated pursuant to 33 CFR 335 through 338.

Comments regarding this Federal project should be submitted in writing to the District Engineer at the above address within 30 days from the date of this notice. Any person who has an interest which may be affected by the construction of this project may request a public hearing. The request must be submitted in writing to the District Engineer within 30 days of the date of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

If you have any questions concerning this Federal project, you may contact Ms. Diana Bisher of this office, telephone 904-232-1131.

WATERWAY & LOCATION: St. Augustine Harbor, St. Johns County, Florida

WORK & PURPOSE: The proposed work consists of periodic maintenance dredging in the Entrance Channel to the required depth and width of 16 feet by 200-300 feet, with an allowable overdepth of three feet. The material is predominately sand with some shell. It is estimated that approximately 500,000 cubic yards of material will be dredged during this periodic dredging event as necessary to provide safe depths for vessels. Materials will be placed in the beach disposal area adjacent to the Anastasia State Park and St. Augustine Beach. A pipeline route will be selected that would minimize environmental impacts. An alternative method of disposal is to dispose of the material in the nearshore disposal area located opposite St. Augustine Beach. The beach area will be utilized whenever possible; however, the nearshore disposal area will be used only when conditions, circumstances and funding constraints warrant. Material placed in the nearshore disposal area will be placed as close as possible to the beach to allow the material to be carried by wave action to the adjacent beaches. A water quality certification has been requested from the Department of Environmental

Protection (DEP) for a period of 10 years, to enable the Corps of Engineers to maintain the channels in a timely manner.

PROJECT AUTHORIZATION:

House Document 133, 81st Congress, 1st Session.

EVALUATION:

A preliminary determination of the impacts of the project has lead us to conclude that an Environmental Impact Statement pursuant to the National Environmental Policy Act is not required. A final determination will be made when all comments are reviewed and a final environmental assessment has been completed.

APPLICABLE LAWS: The following laws are, or may be, applicable to the review of the proposed disposal sites and to the activities affiliated with this Federal project:

1. Section 404 of the Clean Water Act of 1977 (PL 95-217) (33 U.S.C. 1344).
2. Section 302 of the Marine Protection, Research, and Sanctuaries Act of 1972 (PL 92-532, 86 Stat. 1052).
3. The National Environmental Policy Act of 1969 (PL 91-190) (42 U.S.C. 4321-4347).
4. Sections 307(c) (1) and (2) of the Coastal Zone Management Act of 1972 (16 U.S.C. 1456 (c)(1) and (2), 86 Stat. 1280).
5. The Fish and Wildlife Act of 1956 (16 U.S.C. 472a et seq.).
6. The Migratory Marine Game-Fish Act of 1959 (16 U.S.C. 760c-760g).
7. The Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661-666c).
8. The Endangered Species Act of 1973 (PL 93-205) (16 U.S.C. 668aa-668cc-6, 87 Stat. 884).
9. The National Historic Preservation Act of 1966 (16 U.S.C. 470, 80 Stat. 915).
10. Section 313 of the Clean Water Act of 1977 (33 U.S.C. 1323, 82 Stat. 816).

COASTAL ZONE MANAGEMENT: The proposal has been evaluated in accordance with the Florida Coastal Zone Management Act and was determined to be consistent with the goals and intent of the appropriate State statutes. This determination is based on a Preliminary Environmental Evaluation, the Section 404(b)(1) Evaluation, and the Coastal Zone Consistency Determination. Full compliance will be achieved by issuance of the necessary permits from the State.

ENDANGERED SPECIES: The loggerhead sea turtle (*Caretta caretta*) regularly nests on this beach, while the green (*Chelonia mydas*) and the leatherback (*Dermochelys coriacea*) infrequently nest on this barrier island. The Anastasia beach mouse (*Peromyscus polionotus phasma*) is found in the primary and secondary dunes. In addition the West Indian manatee inhabits the harbor area. During earlier planning studies, consultation was conducted with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service by letters dated February 18, 1994 and March 1, 1994, respectively. A Fish and Wildlife Coordination Act Report was prepared for the work and submitted to this office by letter dated December 1, 1994. This report also contained the requested Biological Opinion for the project. No additional consultation is anticipated.

OTHER IMPORTANT RESOURCES: Other important resources considered in the environmental assessment include cultural resources, seagrasses, nearshore hardbottoms, migratory bird nesting, and recreation.

EVALUATION FACTORS: All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

DISSEMINATION OF NOTICE: You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have an interest in this matter.

COORDINATION: This notice is being sent to, and coordinated with, the following agencies:

FEDERAL AGENCIES:

Commander, Seventh Coast Guard District, Miami, FL
Regional Forester, Forest Service, U.S. Dept. of Agriculture
Regional Shellfish Consultant, Food and Drug Administration
Director, Atlantic Marine Cnt., NOAA, Norfolk, VA
FDA, Regional Shellfish Specialist, Atlanta, GA
Director, National Park Ser., Southeast Region, Atlanta, GA
Regional Director, National Park Ser., SE Region, Atlanta, GA
Regional Director, Fish & Wildlife Service, Atlanta, GA
Field Supervisor, Fish & Wildlife Service, Jacksonville, FL
Field Supervisor, Fish & Wildlife Service, Vero Beach, FL
Regional Hydrologist, U.S. Geological Survey, Atlanta, GA
District Chief, U.S. Geological Survey, WRD, Tallahassee, FL
Regional Hydrologist, NOAA, National Weather Ser., Fort Worth, TX
Southeast River Forecast Cnt., NOAA, National Weather Service,
Atlanta, GA
Environmental Protection Agency, Office of Federal Activities,
Washington, D.C.
Environmental Protection Agency, Region IV, Atlanta, GA
Federal Energy Regulatory Commission, Atlanta, GA
National Marine Fisheries Service, EA Branch, Panama City, FL
National Marine Fisheries Service, EA Branch, St. Petersburg, FL
Federal Maritime Commission, Office of Environmental Impact,
Washington, D.C.
USDA, Soil Conservation Service, Gainesville, FL
Federal Highway Administration, Tallahassee, FL
Water Resources Coordinator, National Marine Fisheries Service,
Tallahassee, FL
U.S. Post Office, St. Augustine, FL

STATE AGENCIES:

Executive Director, DEP, Tallahassee, FL
DEP, Division of Beaches and Shores, Tallahassee, FL
Florida Game & Fresh Water Commission, Lakeland, FL
Secretary, Dept of Environmental Protection, Tallahassee, FL
Department of Agriculture, Bureau of Soil & Water Conservation,
Gainesville, FL
Director, Div. of Archives, History & Records Management,
Tallahassee, FL
Secretary, Department of Transportation, Tallahassee, FL
State Clearinghouse, Office of Planning & Budgeting,
Tallahassee, FL
St. Johns Water Management District, West Palm Beach, FL

ENVIRONMENTAL ORGANIZATIONS:

Executive Director, Florida Audubon Society, Maitland, FL
Executive Director, Florida Wildlife Federation,
West Palm Beach, FL
Tampa Bay Regional Planning Council, St. Petersburg, FL
National Estuary Program, St. Petersburg, FL

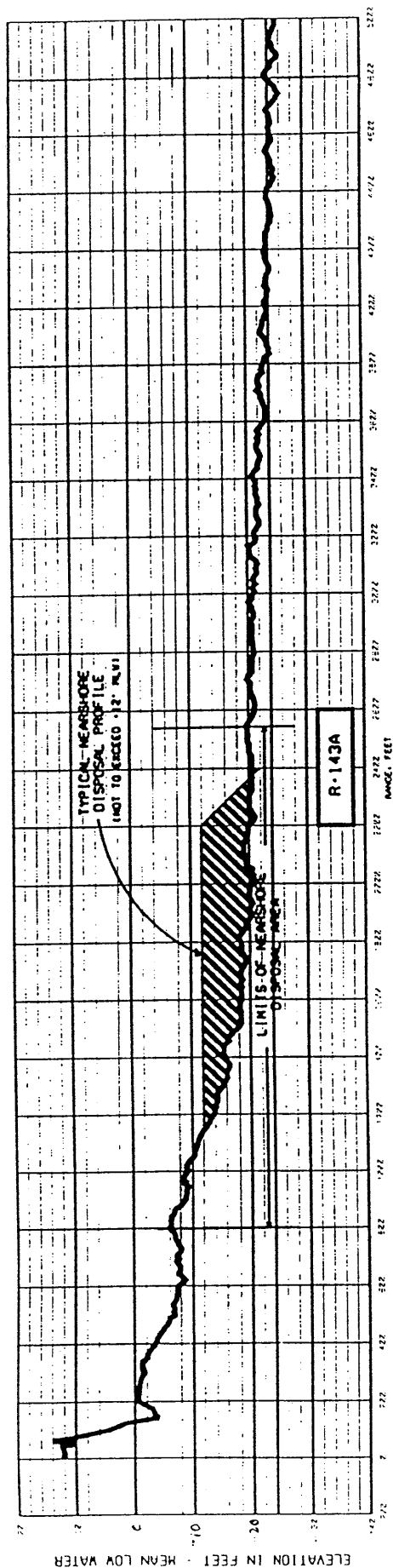
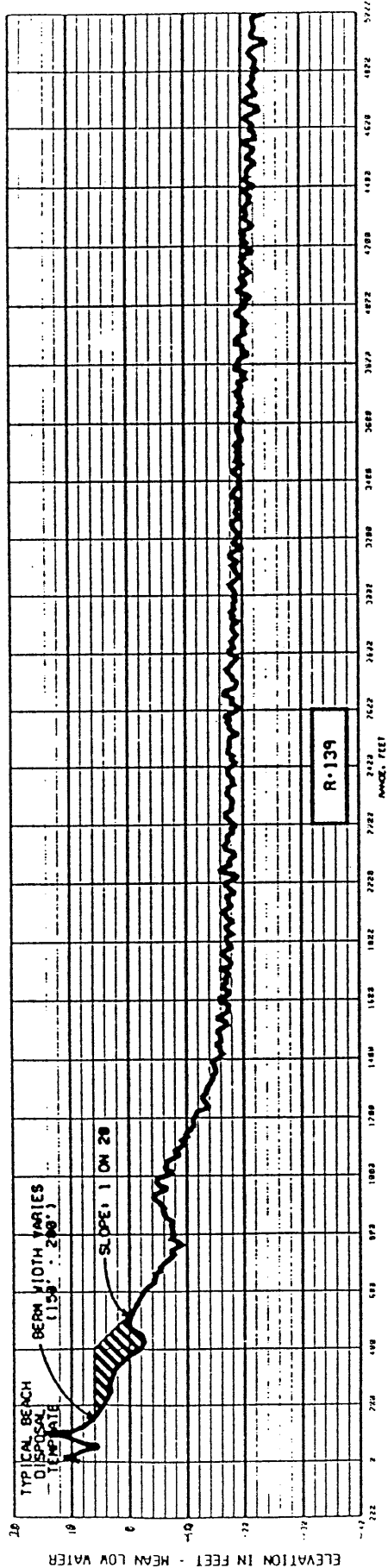
LOCAL GOVERNMENTS:

Board of County Commissioners, St. Johns County, FL
Florida Inland Navigation District, Jupiter, FL
St. Augustine Port and Waterway Authority, FL
City of St. Augustine, FL
City of St. Augustine Beach, FL
Anastasia State Recreation Area, FL

FOR THE COMMANDER:

A handwritten signature in cursive script, appearing to read "Giralmo Diciara".

GIRALMO DICIARA
Chief, Construction-Operations
Division



ST. AUGUSTINE INLET MAINTENANCE DREDGING
TYPICAL BEACH AND NEARSHORE DISPOSAL TEMPLATES



Department of Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

May 15, 1995

Girlando DiChiara, Chief
Construction-Operations Division
Post Office Box 4970
Jacksonville, Florida 32232-0019

Dear Mr. DiChiara:

Subject: Public Notice Number PN-SAH-199

This is in response to the above referenced public notice regarding the maintenance dredging of St. Augustine Inlet. The Department of Environmental Protection and the City of St. Augustine Beach have funds approved for the additional costs of placement of the dredge material on the beach. The placement of maintenance material on the beach is necessary for compliance with the memorandum of understanding regarding the disposal of beach-compatible maintenance dredge material and is critical for relief of shoreline erosion occurring in the St. Augustine Beach area. For additional information please contact Mr. Lonnie Ryder of this office.

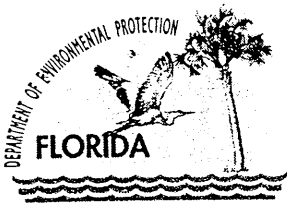
If I may be of any further assistance, please contact me at the letterhead address (add Mail Station 310) or by telephone at 904/487-4475.

Sincerely,

Robert M. Brantly, Jr., P.E.
Bureau of Beaches and Coastal Systems

RMB

cc: Lonnie Ryder, DEP
Max Royal, City of St. Augustine Beach



Department of Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

May 24, 1995

Colonel Terry L. Rice
District Engineer
Jacksonville District
U.S. Army Corps of Engineers
P. O. Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Rice:

RE: Public Notice # PN-SAH-199; Dredging of St. Augustine
Entrance Channel and Spoiling at Anastasia State Park
and St. Augustine Beach

The Division of Recreation & Parks has reviewed the notice and objects to the alternative provisions for the disposition of spoil materials.

Under the prescribed alternative, all of the beach quality spoil materials would be placed in a nearshore disposal site directly seaward of St. Augustine Beach. Although we agree that the beach in this area needs to be protected from further erosion, the alternative disposal plan fails to provide any shore protection for the heavily used public beach at Anastasia State Recreation Area. The beach in the park, especially the southern area north of St. Augustine Beach, is very seriously eroded and needs to be protected.

Beach quality spoil materials that are removed from the channel should be divided in an equitable fashion between the park and St. Augustine Beach. With the application of appropriate environmental constraints, we have no objections to the plans and specs which provide for disposal on both of the eroded beach areas.

If you have any questions concerning the above comments, please call me at (904) 488-8666. We look forward to working with you to ensure that this project not only provides for the